

Before the State Water Resources Control Board**Bay Delta Workshop - 1994****California Sportfishing Protection Alliance****Proposal and Proposed Solution****Bay Delta Pool Proposal and Solution
for the Bay Delta Dilemma and Gridlock****CSPA Proposal**

In order to meet new EPA standards the State Water Board is seeking comments and alternative solutions which may meet the new standards. Approximately 2 million acre-feet of water is needed to meet EPA standards during dry and critically dry years. It is our understanding that the DWR and USBR can meet the EPA standards during normal and wet water years, but cannot meet the new standards in dry and critically dry water years.

The CSPA proposal recommends that the State Water Board to require the banking and reservation of Bay Delta Pool contribution water at reservoirs which have a capacity of 10,000 acre-feet of water or more located on tributaries to the Bay Delta. The CSPA also recommends that direct diversions (diversions without storage facilities) also contribute water during the diversion season. The Bay Delta Pool releases from reservoirs would be made only during dry year and critically dry year conditions. The Bay Delta Pool releases from direct diversion would be made based on the amount of water being diverted. The Bay Delta Pool contribution flows would be 5% during dry year conditions and 10% during critically dry years conditions.

Permitted water rights (senior and junior), pre-1914 water rights and riparian water rights were included in this analysis because all of the water users should contribute and share contribution flows to the Bay Delta Pool. The sharing of the water to meet new EPA standards would be reasonable considering that each individual reservoir and direct diversion had a cumulative reduction to the amount of fresh water flowing into the Bay Delta Pool.

There may be problems with unauthorized diversions of some of the Bay Delta Pool contribution flow before the water reaches the Bay Delta Pool. The State Water Board should hire a Watermaster

and staff to monitor the Bay Delta Pool contribution flows as well as coordinating the releases of water into the Bay Delta Pool from all reservoirs and direct diversions.

The CSPA believes that all water users should share equally in providing fresh water to the Bay Delta Pool during dry and critically dry years. We believe the State Water Board has the authority over all types of water rights under the common law public trust doctrine and under Article X, Section 2 of the California Constitution.

Assumption

This analysis lists reservoirs which are located on tributaries to the Bay Delta. Each reservoir would bank and reserve in storage 15% of its capacity for contribution releases of water to the Bay Delta Pool. 5% of the reserved water should be released during dry years and 10% of the reserved water should be released during critically dry years. All reservoirs with the capacity from 10,000 acre-feet or greater are listed in the analysis.

This analysis also includes contribution flows from direct diversions during the diversion season to the Bay Delta Pool. We did not have the data base to determine the amount of water available and diverted at points of direct diversion during the diversion season during dry years and critically years. The direct diverters who should be included in contributing fresh water to the Bay Delta Pool would be diverters who divert 10,000 acre feet or more of water during the diversion season.

For the Kings River Watershed, reservoirs and direct diversions would contribute 2.5% during dry years and 5% during critically dry years to the Bay Delta Pool. This percentage of water was selected because about 50% of the unimpaired runoff flowed into the San Joaquin River in a state of nature.

Sacramento River Basin

Average Annual Runoff - 22,389,700 AF

Feather River Watershed

**Total Bay Delta Pool Contribution From Reservoir Storage
During Critically Dry Years - 527,500 AF**

**Total Bay Delta Pool Contribution From Reservoir Storage
During Dry Years - 263,750 AF**

Lake Almanor (PG&E)

Capacity - 1,143,800 AF

BAY DELTA POOL CRITICALLY DRY YEAR CONTRIBUTION -
114,380 AF

BAY DELTA POOL DRY YEAR CONTRIBUTION - 57,190 AF

Watershed - North Fork Feather River

Bucks Lake (PG&E)

Capacity - 105,600 AF

BAY DELTA POOL CRITICALLY DRY YEAR CONTRIBUTION -
10,560 AF

BAY DELTA POOL DRY YEAR CONTRIBUTION - 5,280 AF

Watershed - Bucks Creek - North Fork Feather River

Mountain Meadows Reservoir (PG&E)

Capacity - 23,900 AF

BAY DELTA POOL CRITICALLY DRY YEAR CONTRIBUTION - 2,390
AF

BAY DELTA POOL DRY YEAR CONTRIBUTION - 1,195 AF

Watershed - North Fork Feather River

Butt Valley Reservoir (PG&E)

Capacity - 49,900 AF

BAY DELTA POOL CRITICALLY DRY YEAR CONTRIBUTION - 4,990
AF

BAY DELTA POOL DRY YEAR CONTRIBUTION - 2,495 AF

Watershed - Butt Creek - North Fork Feather River

Antelope Lake (DWR)

Capacity - 22,600 AF

BAY DELTA POOL CRITICALLY DRY YEAR CONTRIBUTION - 2,260
AF

BAY DELTA POOL DRY YEAR CONTRIBUTION - 1,130 AF

Watershed - Indian Creek - North Fork Feather River

Lake Davis (DWR)

Capacity - 84,400 AF

BAY DELTA POOL CRITICALLY DRY YEAR CONTRIBUTION - 8,440 AF

BAY DELTA POOL DRY YEAR CONTRIBUTION - 4,220 AF

Watershed - Big Grizzly Creek - Middle Fork Feather River

Frenchman Lake (DWR)

Capacity - 55,500 AF

BAY DELTA POOL CRITICALLY DRY YEAR CONTRIBUTION - 5,550 AF

BAY DELTA POOL DRY YEAR CONTRIBUTION - 2,775 AF

Watershed - Little Last Chance Creek - Middle Fork Feather River

Lake Oroville (DWR)

Capacity - 3,537,600 AF

BAY DELTA POOL CRITICALLY DRY YEAR CONTRIBUTION - 353,760 AF

BAY DELTA POOL DRY YEAR CONTRIBUTION - 176,880 AF

Watershed - Feather River

Thermalito Afterbay (DWR)

Capacity - 81,300 AF

BAY DELTA POOL CRITICALLY DRY YEAR CONTRIBUTION - 8,130 AF

BAY DELTA POOL DRY YEAR CONTRIBUTION - 4,065 AF

Watershed - Feather River

Little Grass Valley Reservoir (OWID)

Capacity - 94,700 AF

BAY DELTA POOL CRITICALLY DRY YEAR CONTRIBUTION - 9,470 AF

BAY DELTA POOL DRY YEAR CONTRIBUTION - 4,735 AF

Watershed - South Fork Feather River

Sly Creek Reservoir (OWID)

Capacity - 65,700 AF

BAY DELTA POOL CRITICALLY DRY YEAR CONTRIBUTION - 6,570 AF

BAY DELTA POOL DRY YEAR CONTRIBUTION - 3,285 AF

Watershed - Lost Creek - South Fork Feather River

Concow Reservoir (TID)
Capacity - 10,000 AF
BAY DELTA POOL CRITICALLY DRY YEAR CONTRIBUTION - 1,000 AF
BAY DELTA POOL DRY YEAR CONTRIBUTION - 500 AF
Watershed - Concow Creek - West Branch Feather River

Putah Creek Watershed

**Total Bay Delta Pool Contribution From Reservoir Storage
During Critically Dry Years - 28,200 AF**

**Total Bay Delta Pool Contribution From Reservoir Storage
During Dry Years - 14,100 AF**

Lake Berryessa (USBR)
Capacity - 1,592,000 AF
BAY DELTA POOL CRITICALLY DRY YEAR CONTRIBUTION -
28,200 AF*
BAY DELTA POOL DRY YEAR CONTRIBUTION - 14,100 AF*
*Adjusted to 10% of unimpaired flow, but should be based on storage
capacity during dry year and critically dry years
Watershed - Putah Creek

Stony Creek Watershed

**Total Bay Delta Pool Contribution From Reservoir Storage
During Critically Dry Years - 24,460 AF**

**Total Bay Delta Pool Contribution From Reservoir Storage
During Dry Years - 12,230 AF**

Black Butte Reservoir (US Army Corps)
Capacity - 143,700 AF
BAY DELTA POOL CRITICALLY DRY YEAR CONTRIBUTION -
14,370 AF
BAY DELTA POOL DRY YEAR CONTRIBUTION - 7,185 AF
Watershed - Stony Creek

East Park Reservoir (USBR)
Capacity - 50,900 AF
BAY DELTA POOL CRITICALLY DRY YEAR CONTRIBUTION - 5,090 AF
BAY DELTA POOL DRY YEAR CONTRIBUTION - 2,545 AF
Watershed - Stony Creek

Stony Gorge Reservoir (USBR)

Capacity - 50,000 AF

BAY DELTA POOL CRITICALLY DRY YEAR CONTRIBUTION - 5,000 AF

BAY DELTA POOL DRY YEAR CONTRIBUTION - 2,500 AF

Watershed - Stony Creek

Yuba River Watershed

Total Bay Delta Pool Contribution From Reservoir Storage During Critically Dry Years - 141,162 AF

Total Bay Delta Pool Contribution From Reservoir Storage During Dry Years - 70,581 AF

Bowman Lake (NID)

Capacity - 68,500 AF

BAY DELTA POOL CRITICALLY DRY YEAR CONTRIBUTION - 6,850 AF

BAY DELTA POOL DRY YEAR CONTRIBUTION - 3,425 AF

Watershed - Canyon Creek - South Yuba

Jackson Meadows Reservoir (NID)

Capacity - 69,200 AF

BAY DELTA POOL CRITICALLY DRY YEAR CONTRIBUTION - 6,920 AF

BAY DELTA POOL DRY YEAR CONTRIBUTION - 3,460 AF

Watershed - Middle Yuba River

Upper Scotts Flat Reservoir (NID)

Capacity - 48,500 AF

BAY DELTA POOL CRITICALLY DRY YEAR CONTRIBUTION - 4,850 AF

BAY DELTA POOL DRY YEAR CONTRIBUTION - 2,425 AF

Watershed - Deer Creek - Lower Yuba River

Merle Collins Reservoir (Browns Valley Irrigation District)

Capacity - 57,000 AF

BAY DELTA POOL CRITICALLY DRY YEAR CONTRIBUTION - 5,700 AF

BAY DELTA POOL DRY YEAR CONTRIBUTION - 2,850 AF

Watershed - Dry Creek - Lower Yuba River

New Bullards Bar Reservoir (YCWA)

Capacity - 966,100 AF

BAY DELTA POOL CRITICALLY DRY YEAR CONTRIBUTION -
96,610 AF
BAY DELTA POOL DRY YEAR CONTRIBUTION - 48,305 AF
Watershed - North Yuba River

Lake Spaulding (PG&E)
Capacity - 135,700 AF
BAY DELTA POOL CRITICALLY DRY YEAR CONTRIBUTION -
13,570 AF
BAY DELTA POOL DRY YEAR CONTRIBUTION - 6,785 AF
Watershed - South Yuba River

Fordyce Lake (PG&E)
Capacity - 46,662 AF
BAY DELTA POOL CRITICALLY DRY YEAR CONTRIBUTION - 4,662
AF
BAY DELTA POOL DRY YEAR CONTRIBUTION - 2,331 AF
Watershed - Fordyce Creek

Englebright Reservoir (PG&E)
Capacity - 70,000 AF
BAY DELTA POOL CRITICALLY DRY YEAR CONTRIBUTION - 7,000
AF
BAY DELTA POOL DRY YEAR CONTRIBUTION - 3,500 AF
Watershed - Lower Yuba River

Pit River Watershed

**Total Bay Delta Pool Contribution From Reservoir Storage
During Critically Dry Years - 22,530 AF**

**Total Bay Delta Pool Contribution From Reservoir Storage
During Dry Years - 11,265 AF**

Lake Britton (PG&E)
Capacity - 40,600 AF
BAY DELTA POOL CRITICALLY DRY YEAR CONTRIBUTION - 4,060
AF
BAY DELTA POOL DRY YEAR CONTRIBUTION - 2,030 AF
Watershed - Pit River

Iron Canyon Reservoir (PG&E)
Capacity - 24,200 AF
BAY DELTA POOL CRITICALLY DRY YEAR CONTRIBUTION - 2,420
AF
BAY DELTA POOL DRY YEAR CONTRIBUTION - 1,210 AF

Watershed - Pit River

Pit No. 6 Reservoir (PG&E)

Capacity - 15,900 AF

BAY DELTA POOL CRITICALLY DRY YEAR CONTRIBUTION - 1,590 AF

BAY DELTA POOL DRY YEAR CONTRIBUTION - 795 AF

Watershed - Pit River

Pit No. 7 Reservoir (PG&E)

Capacity - 34,600 AF

BAY DELTA POOL CRITICALLY DRY YEAR CONTRIBUTION - 3,460 AF

BAY DELTA POOL DRY YEAR CONTRIBUTION - 1,730 AF

Watershed - Pit River

Raker Reservoir

Capacity - 10,000 AF

BAY DELTA POOL CRITICALLY DRY YEAR CONTRIBUTION - 1,000 AF

BAY DELTA POOL DRY YEAR CONTRIBUTION - 500 AF

Watershed - Pit River

Tule Lake Reservoir

Capacity - 20,000 AF

BAY DELTA POOL CRITICALLY DRY YEAR CONTRIBUTION - 2,000 AF

BAY DELTA POOL DRY YEAR CONTRIBUTION - 1,000 AF

Watershed - Pit River

Big Sage Reservoir

Capacity - 80,000 AF

BAY DELTA POOL CRITICALLY DRY YEAR CONTRIBUTION - 8,000 AF

BAY DELTA POOL DRY YEAR CONTRIBUTION - 4,000 AF

Watershed - Pit River

Cache Creek Watershed

Total Bay Delta Pool Contribution From Reservoir Storage During Critically Dry Years - 61,400 AF

Total Bay Delta Pool Contribution From Reservoir Storage During Dry Years - 30,700 AF

Clear Lake (YCWC&FCD))
Capacity - 313,000 AF
BAY DELTA POOL CRITICALLY DRY YEAR CONTRIBUTION -
31,300 AF
BAY DELTA POOL DRY YEAR CONTRIBUTION - 15,650 AF
Watershed - Cache Creek

Indian Valley Reservoir (YCWC&FCD)
Capacity - 301,000 AF
BAY DELTA POOL CRITICALLY DRY YEAR CONTRIBUTION -
30,100 AF
BAY DELTA POOL DRY YEAR CONTRIBUTION - 15,050 AF
Watershed - Cache Creek

American River Watershed

**Total Bay Delta Pool Contribution From Reservoir Storage
During Critically Dry Years - 177,650 AF**

**Total Bay Delta Pool Contribution From Reservoir Storage
During Dry Years - 88,825 AF**

Folsom Reservoir (USBR)
Capacity - 974,500 AF
BAY DELTA POOL CRITICALLY DRY YEAR CONTRIBUTION -
97,450 AF
BAY DELTA POOL DRY YEAR CONTRIBUTION - 48,725 AF
Watershed - American River

French Meadows Reservoir (PCWA)
Capacity - 136,400 AF
BAY DELTA POOL CRITICALLY DRY YEAR CONTRIBUTION -
13,640 AF
BAY DELTA POOL DRY YEAR CONTRIBUTION - 6,820 AF
Watershed - Middle Fork American River

Hell Hole Reservoir (PCWA)
Capacity - 207,600 AF
BAY DELTA POOL CRITICALLY DRY YEAR CONTRIBUTION -
20,760 AF
BAY DELTA POOL DRY YEAR CONTRIBUTION - 10,380 AF
Watershed - Rubicon River

Ice House Reservoir (SMUD)
Capacity - 46,000 AF
BAY DELTA POOL CRITICALLY DRY YEAR CONTRIBUTION - 4,600
AF
BAY DELTA POOL DRY YEAR CONTRIBUTION - 2,300 AF
Watershed - South Fork Silver Creek

Union Valley Reservoir (SMUD)
Capacity - 277,300 AF
BAY DELTA POOL CRITICALLY DRY YEAR CONTRIBUTION -
27,730 AF
BAY DELTA POOL DRY YEAR CONTRIBUTION - 13,865 AF
Watershed - Silver Creek

Loon Lake (SMUD)
Capacity - 76,500 AF
BAY DELTA POOL CRITICALLY DRY YEAR CONTRIBUTION - 7,650
AF
BAY DELTA POOL DRY YEAR CONTRIBUTION - 3,825 AF
Watershed - Gerle Creek

Stumpy Meadows Reservoir (Georgetown Public Utility)
Capacity - 20,000 AF
BAY DELTA POOL CRITICALLY DRY YEAR CONTRIBUTION - 2,000
AF
BAY DELTA POOL DRY YEAR CONTRIBUTION - 1,000 AF
Watershed - Pilot Creek - Rubicon River

Slab Creek Reservoir (SMUD)
Capacity - 21,600 AF
BAY DELTA POOL CRITICALLY DRY YEAR CONTRIBUTION - 2,160
AF
BAY DELTA POOL DRY YEAR CONTRIBUTION - 1,080 AF
Watershed - South Fork American River

Caples Lake (PG&E)
Capacity - 16,600 AF
BAY DELTA POOL CRITICALLY DRY YEAR CONTRIBUTION - 1,660
AF
BAY DELTA POOL DRY YEAR CONTRIBUTION - 1,330 AF
Watershed - South Fork American River

McCloud River Watershed

**Total Bay Delta Pool Contribution From Reservoir Storage
During Critically Dry Years - 3,520 AF**

**Total Bay Delta Pool Contribution From Reservoir Storage
During Dry Years - 1,760 AF**

Lake McCloud (PG&E)

Capacity - 35,200 AF

BAY DELTA POOL CRITICALLY DRY YEAR CONTRIBUTION - 3,520
AF

BAY DELTA POOL DRY YEAR CONTRIBUTION - 1,760 AF

Watershed - McCloud River

Bear River Watershed

**Total Bay Delta Pool Contribution From Reservoir Storage
During Critically Dry Years - 17,000 AF**

**Total Bay Delta Pool Contribution From Reservoir Storage
During Dry Years - 8,500 AF**

Rollins Reservoir (NID)

Capacity - 66,000 AF

BAY DELTA POOL CRITICALLY DRY YEAR CONTRIBUTION - 6,600
AF

BAY DELTA POOL DRY YEAR CONTRIBUTION - 3,300 AF

Watershed - Bear River

New Camp Far West (South Sutter Water District)

Capacity - 104,000 AF

BAY DELTA POOL CRITICALLY DRY YEAR CONTRIBUTION -
10,400 AF

BAY DELTA POOL DRY YEAR CONTRIBUTION - 5,200 AF

Watershed - Bear River

Sacramento River Watershed

**Total Bay Delta Pool Contribution From Reservoir Storage
During Critically Dry Years - 846,690 AF**

**Total Bay Delta Pool Contribution From Reservoir Storage
During Dry Years - 423,345 AF**

Shasta Lake (USBR)
Capacity - 4,552,000 AF
BAY DELTA POOL CRITICALLY DRY YEAR CONTRIBUTION -
455,200 AF
BAY DELTA POOL DRY YEAR CONTRIBUTION - 227,600 AF
Watershed - Sacramento River

Whiskeytown Lake (USBR)
Capacity - 241,100 AF
BAY DELTA POOL CRITICALLY DRY YEAR CONTRIBUTION -
24,110 AF
BAY DELTA POOL DRY YEAR CONTRIBUTION - 12,055 AF
Watershed - (Clear Creek Water Only - no reservoir contribution to
Bay Delta Pool using Trinity River water)

Keswick Reservoir
Capacity - 23,800 AF
BAY DELTA POOL CRITICALLY DRY YEAR CONTRIBUTION - 2,380
AF
BAY DELTA POOL DRY YEAR CONTRIBUTION - 1,190 AF
Watershed - South Fork American River

Lake Siskiyou (SCFCWCD)
Capacity - 30,000 AF
BAY DELTA POOL CRITICALLY DRY YEAR CONTRIBUTION - 3,000
AF
BAY DELTA POOL DRY YEAR CONTRIBUTION - 1,500 AF
Watershed - Upper Sacramento River

Sacramento River - Direct Diversions

**Total Bay Delta Pool Contribution From Reservoir Storage
During Critically Dry Years - 10% of Direct Diversion During
Diversion Season**

**Total Bay Delta Pool Contribution From Reservoir Storage
During Dry Years - 5% of Direct Diversion During Diversion
Season**

Glenn Colusa Irrigation District

Direct Diversions -

APPLC000018 - 110 cfs - 3/01 to 11/01 - Sacramento River
APPLC001554 - 83.27 cfs - 4/15 to 10/01 - Sacramento River
APPLC001624 - 32.010 cfs - 4/15 to 11/01 - Sacramento River
APPLC008688 - 2.0 cfs - 4/15 to 10/01 - Hunters Creek
APPLC012125 - 11.0 cfs - 4/20 to 9/30 - Stone Corral Creek

APPLC023005 - 2.0 cfs - 4/01 to 6/30 & 9/01 to 12/31 - Unnamed
Tributary
STATE007367 - 2,700 cfs - 4/1 to 10/31 - Sacramento River
STATE007368 - 134 cfs - 4/01 to 8/31 - Sacramento River
TOTAL DIVERSION - 3,074.280 cfs
BAY DELTA POOL CRITICALLY DRY YEAR CONTRIBUTION - 10%
of direct diversion during the diversion season
BAY DELTA POOL DRY YEAR CONTRIBUTION - 5% of direct
diversion during diversion season
Watershed - Sacramento River and Tributaries

Anderson Cottonwood Irrigation District
Direct Diversion -
SEC12000916 - 400 cfs - 01/01 to 12/31
STATE012208 - 50 cfs - 3/01 to 10/31
BAY DELTA POOL CRITICALLY DRY YEAR CONTRIBUTION - 10%
of direct diversion during diversion season
BAY DELTA POOL DRY YEAR CONTRIBUTION - 5% of direct
diversion during diversion season.
Watershed - Sacramento River

Tehama Colusa Canal (USBR)
Direct Diversion - No data
BAY DELTA POOL CRITICALLY DRY YEAR CONTRIBUTION - 10%
of direct diversion during season of diversion
BAY DELTA POOL DRY YEAR CONTRIBUTION - 5% of direct
diversion during season of diversion
Watershed - Sacramento River (Red Bluff Diversion Dam)

All Other Direct Diversions (Not mentioned by name in this analysis)
BAY DELTA POOL CRITICALLY DRY YEAR CONTRIBUTION - 10%
of direct diversion during diversion season
BAY DELTA POOL DRY YEAR CONTRIBUTION - 5% of direct
diversion during diversion season

SACRAMENTO RIVER BASIN - TOTAL CONTRIBUTION

**TOTAL RESERVOIR CONTRIBUTION DURING CRITICALLY
DRY YEAR - 1,850,112 AF**

**TOTAL RESERVOIR CONTRIBUTION DURING DRY YEAR -
925,056 AF**

**TOTAL DIRECT DIVERSION CONTRIBUTION DURING
CRITICALLY DRY YEAR - 10% of direct diversion during
diversion season**

**TOTAL DIRECT DIVERSION CONTRIBUTION DURING DRY
YEAR - 5% of direct diversion during diversion season**

**San Joaquin River Basin
Average Annual Runoff - 7,933,300 AF
Excluding Kings River Watershed**

San Joaquin River Watershed

**Total Bay Delta Pool Contribution From Reservoir Storage
During Critically Dry Years - 117,782 AF**

**Total Bay Delta Pool Contribution From Reservoir Storage
During Dry Years - 58,891 AF**

Bass Lake (PG&E)

Capacity - 45,100 AF

**BAY DELTA POOL CRITICALLY DRY YEAR CONTRIBUTION -
4,510 AF**

BAY DELTA POOL DRY YEAR CONTRIBUTION - 2,255 AF

Watershed - North Fork Willow Creek - San Joaquin River

Florence Lake (SCE)

Capacity - 64,400 AF

**BAY DELTA POOL CRITICALLY DRY YEAR CONTRIBUTION -
6,440 AF**

BAY DELTA POOL DRY YEAR CONTRIBUTION - 3,220 AF

Watershed - South Fork San Joaquin River

Huntington Lake (SCE)

Capacity - 89,200 AF

**BAY DELTA POOL CRITICALLY DRY YEAR CONTRIBUTION -
8,920 AF**

BAY DELTA POOL DRY YEAR CONTRIBUTION - 4,460 AF

Watershed - Big Creek - San Joaquin River

Mammoth Pool Reservoir (SCE)
Capacity - 123,000 AF
BAY DELTA POOL CRITICALLY DRY YEAR CONTRIBUTION -
12,300 AF
BAY DELTA POOL DRY YEAR CONTRIBUTION - 6,150 AF
Watershed - San Joaquin River

Lake Thomas A. Edison (SCE)
Capacity - 125,000 AF
BAY DELTA POOL CRITICALLY DRY YEAR CONTRIBUTION -
12,500 AF
BAY DELTA POOL DRY YEAR CONTRIBUTION - 6,250 AF
Watershed - Mono Creek - San Joaquin River

Shaver Lake (SCE)
Capacity - 135,000 AF
BAY DELTA POOL CRITICALLY DRY YEAR CONTRIBUTION -
13,500 AF
BAY DELTA POOL DRY YEAR CONTRIBUTION - 6,750 AF
Watershed - Steveson Creek - San Joaquin River

Redinger Lake (SCE)
Capacity - 26,120 AF
BAY DELTA POOL CRITICALLY DRY YEAR CONTRIBUTION -
2,612 AF
BAY DELTA POOL DRY YEAR CONTRIBUTION - 1,306 AF
Watershed - San Joaquin River

Millerton Lake - Friant Dam (USBR)
Capacity - 520,000 AF
BAY DELTA POOL CRITICALLY DRY YEAR CONTRIBUTION -
52,000 AF
BAY DELTA POOL DRY YEAR CONTRIBUTION - 26,000 AF
Watershed - San Joaquin River

Los Banos Reservoir (USBR)
Capacity - 30,000 AF
BAY DELTA POOL CRITICALLY DRY YEAR CONTRIBUTION - 3,000
AF
BAY DELTA POOL DRY YEAR CONTRIBUTION - 1,500 AF
Watershed - Los Banos Creek - San Joaquin River

Mariposa Reservoir
Capacity - 20,000 AF
BAY DELTA POOL CRITICALLY DRY YEAR CONTRIBUTION - 2,000
AF

BAY DELTA POOL DRY YEAR CONTRIBUTION - 1,000 AF
Watershed - Mariposa Creek

Stanislaus River Watershed

**Total Bay Delta Pool Contribution From Reservoir Storage
During Critically Dry Years - 269,324 AF**

**Total Bay Delta Pool Contribution From Reservoir Storage
During Dry Years - 134,662 AF**

New Melones Reservoir (USBR)
Capacity - 2,420,000
**BAY DELTA POOL CRITICALLY DRY YEAR CONTRIBUTION -
242,000 AF**
BAY DELTA POOL DRY YEAR CONTRIBUTION - 121,000 AF
Watershed - Stanislaus River

Bearsley Lake (Oakdale - SSJID)
Capacity - 98,500 AF
**BAY DELTA POOL CRITICALLY DRY YEAR CONTRIBUTION -
9,850 AF**
BAY DELTA POOL DRY YEAR CONTRIBUTION - 4,925 AF
Watershed - Middle Fork Stanislaus River

Donnell Lake (Oakdale - SSJID)
Capacity - 64,745 AF
**BAY DELTA POOL CRITICALLY DRY YEAR CONTRIBUTION -
6,474 AF**
BAY DELTA POOL DRY YEAR CONTRIBUTION - 3,237 AF
Watershed - Middle Fork Stanislaus River

Relief Reservoir
Capacity - 20,000 AF
**BAY DELTA POOL CRITICALLY DRY YEAR CONTRIBUTION - 2,000
AF**
BAY DELTA POOL DRY YEAR CONTRIBUTION - 1,000 AF
Watershed - Indian Creek - Middle Fork Stanislaus River

Strawberry Reservoir
Capacity - 20,000 AF
**BAY DELTA POOL CRITICALLY DRY YEAR CONTRIBUTION - 2,000
AF**
BAY DELTA POOL DRY YEAR CONTRIBUTION - 1,000 AF
Watershed - Indian Creek - South Fork Stanislaus River

Tulloch Reservoir
Capacity - 70,000 AF
BAY DELTA POOL CRITICALLY DRY YEAR CONTRIBUTION - 7,000
AF
BAY DELTA POOL DRY YEAR CONTRIBUTION - 3,500 AF
Watershed - Indian Creek - Stanislaus River

Mokelumne River Watershed

**Total Bay Delta Pool Contribution From Reservoir Storage
During Critically Dry Years - 85,000 AF**

**Total Bay Delta Pool Contribution From Reservoir Storage
During Dry Years - 42,500 AF**

Camanche Reservoir (EBMUD)
Capacity - 431,000 AF
BAY DELTA POOL CRITICALLY DRY YEAR CONTRIBUTION -
43,100 AF
BAY DELTA POOL DRY YEAR CONTRIBUTION - 21,550 AF
Watershed - Lower Mokelumne River

Pardee Reservoir (EBMUD)
Capacity - 210,000 AF
BAY DELTA POOL CRITICALLY DRY YEAR CONTRIBUTION -
21,000 AF
BAY DELTA POOL DRY YEAR CONTRIBUTION - 10,500 AF
Watershed - Lower Mokelumne River

Salt Springs Reservoir (PG&E)
Capacity - 139,000 AF
BAY DELTA POOL CRITICALLY DRY YEAR CONTRIBUTION -
13,900 AF
BAY DELTA POOL DRY YEAR CONTRIBUTION - 6,950 AF
Watershed - North Fork Mokelumne River

Lower Bear River Reservoir (PG&E)
Capacity - 50,000 AF
BAY DELTA POOL CRITICALLY DRY YEAR CONTRIBUTION - 5,000
AF
BAY DELTA POOL DRY YEAR CONTRIBUTION - 2,500 AF
Watershed - Indian Creek - Upper Mokelumne River

Bear River Reservoir (PG&E)
Capacity - 10,000 AF
BAY DELTA POOL CRITICALLY DRY YEAR CONTRIBUTION - 1,000
AF
BAY DELTA POOL DRY YEAR CONTRIBUTION - 500 AF
Watershed - Indian Creek - Upper Mokelumne River

Blue Lakes (PG&E)
Capacity - 10,000 AF
BAY DELTA POOL CRITICALLY DRY YEAR CONTRIBUTION - 1,000
AF
BAY DELTA POOL DRY YEAR CONTRIBUTION - 500 AF
Watershed - Indian Creek - Upper Mokelumne River

Tuolumne River Watershed

**Total Bay Delta Pool Contribution From Reservoir Storage
During Critically Dry Years - 276,391 AF**

**Total Bay Delta Pool Contribution From Reservoir Storage
During Dry Years - 138,195 AF**

Cherry Lake (CCSF)
Capacity - 268,000 AF
BAY DELTA POOL CRITICALLY DRY YEAR CONTRIBUTION -
26,800 AF
BAY DELTA POOL DRY YEAR CONTRIBUTION - 13,400 AF
Watershed - Tuolumne River

Hetch Hetchy Reservoir (CCSF)
Capacity - 360,400 AF
BAY DELTA POOL CRITICALLY DRY YEAR CONTRIBUTION -
36,040 AF
BAY DELTA POOL DRY YEAR CONTRIBUTION - 18,020 AF
Watershed - Tuolumne River

Lake Eleanor (CCSF)
Capacity - 25,510 AF
BAY DELTA POOL CRITICALLY DRY YEAR CONTRIBUTION -
2,551 AF
BAY DELTA POOL DRY YEAR CONTRIBUTION - 1,275 AF
Watershed - Tuolumne River

Don Pedro Reservoir (TID/MID)
Capacity - 2,030,000 AF
BAY DELTA POOL CRITICALLY DRY YEAR CONTRIBUTION -
203,000 AF
BAY DELTA POOL DRY YEAR CONTRIBUTION - 101,500 AF
Watershed - Lower Tuolumne River

Turlock Lake (TID)
Capacity - 50,000 AF
BAY DELTA POOL CRITICALLY DRY YEAR CONTRIBUTION - 5,000
AF
BAY DELTA POOL DRY YEAR CONTRIBUTION - 2,500 AF
Watershed - Lower Tuolumne River

Modesto Lake (MID)
Capacity - 30,000 AF
BAY DELTA POOL CRITICALLY DRY YEAR CONTRIBUTION - 3,000
AF
BAY DELTA POOL DRY YEAR CONTRIBUTION - 1,500 AF
Watershed - Lower Tuolumne River

Merced River Watershed

**Total Bay Delta Pool Contribution From Reservoir Storage
During Critically Dry Years - 103,400 AF**

**Total Bay Delta Pool Contribution From Reservoir Storage
During Dry Years - 51,700 AF**

McClure Lake at Exchequer (MID)
Capacity - 1,024,000 AF
BAY DELTA POOL CRITICALLY DRY YEAR CONTRIBUTION -
102,400 AF
BAY DELTA POOL DRY YEAR CONTRIBUTION - 51,200 AF
Watershed - Merced River

Lake McSwain
Capacity - 10,000 AF
BAY DELTA POOL CRITICALLY DRY YEAR CONTRIBUTION -
1,000 AF
BAY DELTA POOL DRY YEAR CONTRIBUTION - 500 AF
Watershed - Merced River

Calaveras River Watershed

**Total Bay Delta Pool Contribution From Reservoir Storage
During Critically Dry Years - 36,500 AF**

**Total Bay Delta Pool Contribution From Reservoir Storage
During Dry Years - 18,250 AF**

New Hogan Reservoir (US Corps of Engineers)

Capacity - 325,000 AF

**BAY DELTA POOL CRITICALLY DRY YEAR CONTRIBUTION -
32,500 AF**

BAY DELTA POOL DRY YEAR CONTRIBUTION - 16,250 AF

Watershed - Calaveras River

Salt Springs Valley Reservoir

Capacity - 10,000 AF

**BAY DELTA POOL CRITICALLY DRY YEAR CONTRIBUTION -
1,000 AF**

BAY DELTA POOL DRY YEAR CONTRIBUTION - 500 AF

Watershed - Calaveras River

Woodward Reservoir

Capacity - 30,000 AF

**BAY DELTA POOL CRITICALLY DRY YEAR CONTRIBUTION -
3,000 AF**

BAY DELTA POOL DRY YEAR CONTRIBUTION - 1,500 AF

Watershed - Calaveras River

Chowchilla River Watershed

**Total Bay Delta Pool Contribution From Reservoir Storage
During Critically Dry Years - 15,000 AF**

**Total Bay Delta Pool Contribution From Reservoir Storage
During Dry Years - 7,500 AF**

Buchanan Dam (USBR)

Capacity - 150,000 AF

**BAY DELTA POOL CRITICALLY DRY YEAR CONTRIBUTION -
15,000 AF**

BAY DELTA POOL DRY YEAR CONTRIBUTION - 7,500 AF

Watershed - Chowchilla River

Fresno River Watershed

**Total Bay Delta Pool Contribution From Reservoir Storage
During Critically Dry Years - 9,000 AF**

**Total Bay Delta Pool Contribution From Reservoir Storage
During Dry Years - 4,500 AF**

Hensley Lake

Capacity - 90,000 AF

**BAY DELTA POOL CRITICALLY DRY YEAR CONTRIBUTION -
9,000 AF**

BAY DELTA POOL DRY YEAR CONTRIBUTION - 4,500 AF

Watershed - Fresno River

San Joaquin River Basin - Direct Diversions

All Direct Diversions (Not mentioned by name in this analysis)

**BAY DELTA POOL CRITICALLY DRY YEAR CONTRIBUTION - 10%
of direct diversion during diversion season**

**BAY DELTA POOL DRY YEAR CONTRIBUTION - 5% of direct
diverston during diversion season**

**Total Bay Delta Pool Contribution From Direct Diversions
During Critically Dry Years - 10% of Direct Diversion During
Diversion Season**

**Total Bay Delta Pool Contribution From Direct Diversions
During Dry Years - 5% of Direct Diversion During Diversion
Season**

SAN JOAQUIN RIVER BASIN - TOTAL CONTRIBUTION

**TOTAL RESERVOIR CONTRIBUTION DURING CRITICALLY
DRY YEAR - 912,397 AF**

**TOTAL RESERVOIR CONTRIBUTION DURING DRY YEAR -
456,198 AF**

**TOTAL DIRECT DIVERSION CONTRIBUTION DURING
CRITICALLY DRY YEAR - 10 % of direct diversion during
diversion season**

**TOTAL DIRECT DIVERSION CONTRIBUTION DURING DRY
YEAR - 5 % of direct diversion during diversion season**

Kings River Watershed

**Total Bay Delta Pool Contribution From Reservoir Storage
During Critically Dry Years - 69,260 AF**

**Total Bay Delta Pool Contribution From Reservoir Storage
During Dry Years - 34,630 AF**

Pine Flat Reservoir (US Army Corps of Engineer)

Capacity - 1, 001,000 AF

**BAY DELTA POOL CRITICALLY DRY YEAR CONTRIBUTION -
50,500 AF (5%)**

BAY DELTA POOL DRY YEAR CONTRIBUTION - 25,250 AF (2.5%)

Watershed - Kings River

Courtright Reservoir (PG&E)

Capacity - 123,300 AF

**BAY DELTA POOL CRITICALLY DRY YEAR CONTRIBUTION -
12,330 AF**

BAY DELTA POOL DRY YEAR CONTRIBUTION - 6,165 AF

Watershed - Helms Creek - North Fork Kings River

Wishon Reservoir (PG&E)

Capacity - 128,600 AF

**BAY DELTA POOL CRITICALLY DRY YEAR CONTRIBUTION -
6,430 AF (5%)**

BAY DELTA POOL DRY YEAR CONTRIBUTION - 3,215 AF (2.5%)

Watershed - Kings River

Kings River - Direct Diversions

Alta Irrigation District

Direct Diversion -

STATE001918 - 1,712 cfs - 6/01 to 8/31

**BAY DELTA POOL CRITICALLY DRY YEAR CONTRIBUTION - 5% of
direct diversion during diversion season**

**BAY DELTA POOL DRY YEAR CONTRIBUTION - 2.5% of direct
diversion during diversion season**

Watershed - Kings River

Burrel Ditch Company

Direct Diversion -

STATE001919 - 717 cfs - 7/01 to 8/31

**BAY DELTA POOL CRITICALLY DRY YEAR CONTRIBUTION - 5% of
direct diversion during diversion season**

**BAY DELTA POOL DRY YEAR CONTRIBUTION - 2.5% of direct diversion during diversion season
Watershed - Kings River**

**Consolidated Irrigation District
Direct Diversion -
STATE001923 - 2,330 cfs - 6/01 to 8/31
BAY DELTA POOL CRITICALLY DRY YEAR CONTRIBUTION - 5% of direct diversion during diversion season
BAY DELTA POOL DRY YEAR CONTRIBUTION - 2.5% of direct diversion during diversion season**

**Consolidated Irrigation District
STATE001925 - 2,330 cfs - 3/1 to 8/31
BAY DELTA POOL CRITICALLY DRY YEAR CONTRIBUTION - 5% of direct diversion during diversion season
BAY DELTA POOL DRY YEAR CONTRIBUTION - 2.5% of direct diversion during diversion season**

**Consolidated Irrigation District
STATE001926 - 1,465 CFS - 6/01 to 7/31
BAY DELTA POOL CRITICALLY DRY YEAR CONTRIBUTION - 5% of direct diversion during diversion season
BAY DELTA POOL DRY YEAR CONTRIBUTION - 2.5% of direct diversion during diversion season
Watershed - Kings River**

**Fresno Irrigation District
Direct Diversion -
APPLC000360 - 5,000 cfs - 01/01 to 12/31
BAY DELTA POOL CRITICALLY DRY YEAR CONTRIBUTION - 5% of direct diversion during diversion season
BAY DELTA POOL DRY YEAR CONTRIBUTION - 2.5 % of direct diversion during diversion season**

**Fresno Irrigation District
APPLC005640 - 3,059 cfs - 5/01 to 7/31
BAY DELTA POOL CRITICALLY DRY YEAR CONTRIBUTION - 5% of direct diversion during diversion season
BAY DELTA POOL DRY YEAR CONTRIBUTION - 2.5% of direct diversion during diversion season**

**Fresno Irrigation District
STATE001937 - 1,465 cfs - 2/01 to 10/31
BAY DELTA POOL CRITICALLY DRY YEAR CONTRIBUTION - 5% of direct diversion during diversion season**

BAY DELTA POOL DRY YEAR CONTRIBUTION - 2.5% of direct diversion during diversion season

Fresno Irrigation District

STATE001938 - 580 cfs - 01/01 to 12/31

BAY DELTA POOL CRITICALLY DRY YEAR CONTRIBUTION - 5% of direct diversion during diversion season

BAY DELTA POOL DRY YEAR CONTRIBUTION - 2.5% of direct diversion during diversion season

Watershed - Kings River

Kings River Conservation District

Direct Diversion -

APPLC026001 - 452 cfs - 01/01 to 12/31

BAY DELTA POOL CRITICALLY DRY YEAR CONTRIBUTION - 5% of direct diversion during diversion season

BAY DELTA POOL DRY YEAR CONTRIBUTION - 2.5% of direct diversion during diversion season

Watershed - Deer Creek - Kings River

Kings River Water District

Direct Diversion -

STATE001947 - 175 cfs - 3/01 to 11/30 (17.5 cfs) DDS

STATE001948 - 175 cfs - 4/01 to 11/30 (17.5 cfs) DDS

STATE001949 - 175 cfs - 2/01 to 11/30 (17.5 cfs) DDS

STATE001950 - 175 cfs - 1/01 to 12/31 (17.5 cfs) DDS

STATE001951 - 175 cfs - 4/01 to 12/31 (17.5 cfs) DDS

STATE001952 - 175 cfs - 4/01 to 11/30 (17.5 cfs) DDS

STATE001953 - 175 cfs - 1/01 to 11/30 (17.5 cfs) DDS

STATE001954 - 175 cfs - 1/01 to 10/31 (17.5 cfs) DDS

STATE001955 - 175 cfs - 3/01 to 10/31 (17.5 cfs) DDS

STATE001956 - 175 cfs - 4/01 to 10/31 (17.5 cfs) DDS

STATE001957 - 175 cfs - 3/01 to 11/30 (17.5 cfs) DDS

STATE001958 - 175 cfs - 4/01 to 10/31 (17.5 cfs) DDS

STATE001959 - 175 cfs - No Data (17.5 cfs) DDS

STATE001960 - 175 cfs - 12/01 to 10/31 (17.5 cfs) DDS

STATE001961 - 175 cfs - 3/01 to 10/31 (17.5 cfs) DDS

STATE001962 - 175 cfs - 6/1 to 9/30 (17.5 cfs) DDS

STATE001963 - 175 cfs - 5/01 to 9/30 (17.5 cfs) DDS

STATE001964 - 175 cfs - 4/01 to 10/31 (17.5 cfs) DDS

BAY DELTA POOL CRITICALLY DRY YEAR CONTRIBUTION -

TOTAL - 315 cfs DDS - 5% of direct diversion during diversion season

BAY DELTA POOL DRY YEAR CONTRIBUTION - 2.5% of direct diversion during diversion season

Stison Canal and Irrigation Company

Direct Diversion -

STATE001981 - 315 cfs - 6/01 to 9/30

BAY DELTA POOL CRITICALLY DRY YEAR CONTRIBUTION - 5% of direct diversion during diversion season

BAY DELTA POOL DRY YEAR CONTRIBUTION - 960 AF or 2.5% of direct diversion during diversion season

Watershed - Kings River

James Irrigation District

Direct Diversion -

STATE001939 - 226 cfs - 1/1 to 2/28

BAY DELTA POOL CRITICALLY DRY YEAR CONTRIBUTION - 5% of direct diversion during diversion season

BAY DELTA POOL DRY YEAR CONTRIBUTION - 2.5% of direct diversion during diversion season

Watershed - Kings River

All Direct Diversions (Not mentioned by name in this analysis)

BAY DELTA POOL CRITICALLY DRY YEAR CONTRIBUTION - 10% of direct diversion during diversion season

BAY DELTA POOL DRY YEAR CONTRIBUTION - 5% of direct diversion during diversion season

KINGS RIVER BASIN - TOTAL CONTRIBUTION

TOTAL RESERVOIR CONTRIBUTION DURING CRITICALLY DRY YEAR - 69,260 AF

TOTAL RESERVOIR CONTRIBUTION DURING DRY YEAR - 34,630 AF

TOTAL DIRECT DIVERSION CONTRIBUTION DURING CRITICALLY DRY YEAR - 5% of direct diversion during diversion season

TOTAL DIRECT DIVERSION CONTRIBUTION DURING DRY YEAR - 225,493 AF or 2.5% of direct diversion during diversion season

**SACRAMENTO RIVER AND SAN JOAQUIN RIVER BASINS,
EXCLUDING KINGS RIVER BASIN - TOTAL CONTRIBUTION
TO BAY DELTA POOL**

**TOTAL RESERVOIR CONTRIBUTION DURING CRITICALLY
DRY YEAR - 2,762,509 AF**

**TOTAL RESERVOIR CONTRIBUTION DURING DRY YEAR -
1,381,254 AF**

**TOTAL DIRECT DIVERSION CONTRIBUTION DURING
CRITICALLY DRY YEAR - 10 % of direct diversion during
diversion season**

**TOTAL DIRECT DIVERSION CONTRIBUTION DURING DRY
YEAR - 5 % of direct diversion during diversion season**

CSPA/BB/MAY/94

FOOTNOTES

- 1) Bay Delta Pool Contribution plus existing and proposed modified instream fish and environmental flow requirements from reservoirs and below direct diversions.
- 2) Direct diversion rates not included for reservoirs and not adjusted for contribution to Bay Delta Pool.
- 3) At USBR project, Bay Delta Pool Contribution plus CVPIA water, plus existing and proposed modified fish and environmental flow requirements.
- 4) Bay Delta Pool Contribution apply to permitted and licensed water rights, pre-1914 rights and riparian water rights as noted.
- 5) Reservoir capacity of 10,000 acre-feet or greater included in reservoir Bay Delta contributions
- 6) STATE = Statement of Diversion and Use
- 7) APPLC = Appropriation
- 8) SEC12 = SEC 12 Filing

References

- 1. List of Current Water Right Holders and New Applicants Within The San Francisco/Sacramento-San Joaquin Delta Hydrologic Basin; Volume 1; March 16, 1987; State Water Resources Control Board.**
- 2. Water Resources Data for California; Volumes 4; Northern Central Valley Basin from Honey Lake Basin to Oregon State Line; U.S. Geological Survey Water-Data Reports.**
- 3. Water Resources Data for California; Volumes 3; Southern Central Valley Basins and the Great Basin from Walker River to Truckee River; U.S. Geological Survey Water-Data Reports.**
- 4. Inventory of Instream Flow Requirements Related to Stream Diversion; Bulletin 216; December, 1982; Department of Water Resources.**
- 5. Sacramento-San Joaquin Stream and Reservoir Systems Map; June, 1987; Department of Water Resources; Division of Flood Management; Flood Operations Branch.**
- 6. California Water Plan Update; Draft; Volume 2; November 1993; Bulletin 160-93; Department of Water Resources.**
- 7. California Central Valley Unimpaired Flow Data; 2nd Edition; February 1987; Department of Water Resources.**